UNITED STATES NAVAL OBSERVATORY

CIRCULAR NO. 34

U. S. Naval Observatory, Washington 25, D. C. January 15, 1952

POSITIONS, AREAS, AND COUNTS OF SUNSPOTS

AUGUST - SEPTEMBER, 1951

By Lucy T. Day

These results are based upon measurements made at the Naval Observatory on plates secured either there or at the Mt. Wilson Observatory. The symbols used for the entries in the successive columns are as follows:

U.T., the epoch of observation in Universal Time.
No., the identifying number of the group assigned by Mt. Wilson.
Δl, the heliographic difference in longitude from the central meridian, measured positive to the west.
φ, the heliographic latitude, measured positive to the north.
ρ, the heliocentric angular distance from the line joining the centers of the Earth and Sun.
A, the true area of the umbra plus penumbra, expressed in millionths of the visible hemisphere.
s, the number of spots.

An asterisk means that no Mt. Wilson number was assigned. Plates secured at the Naval Observatory are indicated by N, and those at Mt. Wilson by W. The plate quality, which follows, is indicated by:

1, Poor; 2, Fair; 3, Good; 4, Very Good; 5, Excellent.

The following five quantities are listed successively at the end of each day, and give for that day:

1. The total number of groups, g.
2. The longitude of the central meridian, L_0.
3. The latitude of the center of the disc, B_0.
4. The total value of A.
5. The total value of s.

The mean daily area and the mean relative sunspot number, $r=10g+s$ are given at the end of the month.

These results are a continuation of those published in the *Monthly Weather Review* from February 1, 1927 to December 31, 1947.

AUGUST

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
1.764	10738	−67	+ 5	67	6	1
N−2	10734	− 3	−11	18	73	9
	10734	+ 2	−11	17	61	11
	10732	+42	− 5	43	48	3
	10732	+43	− 6	45	6	1
	10732	+44	− 5	45	218	10
	10726	+69	− 9	71	24	1
	(4)	(138)	(+6)		436	36
2.649	10740	−60	+ 8	60	16	1
N−3	10740	−58	+ 7	58	16	2
	10738	−53	+ 5	53	12	1
	10738	−49	+ 7	49	6	3
	10737	−37	+14	38	12	4
	10739	−29	+14	30	12	2
	10735	− 3	+ 7	3	12	2
	10734	+10	−10	19	73	6
	10734	+15	−11	23	48	1
	10732	+56	− 5	57	194	2
	(7)	(126)	(+6)		401	24
3.788	10741	−84	− 8	84	291	1
N−3	10740	−46	+ 8	46	36	1
	10740	−41	+ 8	41	97	5
	(*)	− 9	+32	27	6	2
	10734	+26	−11	31	73	3
	10734	+31	−12	36	48	1
	10732	+71	− 5	73	194	1
	(5)	(111)	(+6)		745	14
4.649	10742	−77	+ 9	77	145	1
N−3	10742	−70	+ 9	70	194	1
	10741	−70	− 8	73	339	1
	10740	−32	+ 9	32	61	8
	10740	−30	+ 8	30	48	15
	10740	−29	+10	29	12	3
	10740	−25	+ 8	25	16	2
	(*)	− 9	+19	16	6	4
	10734	+44	−12	45	24	1
	10732	+85	− 5	85	194	1
	(6)	(100)	(+6)		1039	37
5.750	10743	−68	+12	68	61	1
N−3	10742	−63	+ 8	63	194	1
	10742	−55	+ 8	57	242	1
	10741	−57	− 8	59	291	1
	10740	−18	+10	19	170	12
	10740	−12	+ 8	12	97	10
	10734	+60	−13	62	12	1
	(5)	(85)	(+6)		1067	27
6.699	10743	−60	+14	60	48	1
N−2	10743	−58	+10	58	145	1
	10742	−49	+ 9	49	145	1
	10742	−40	+ 8	40	194	1
	10741	−48	− 9	52	48	2
	10741	−43	− 8	45	436	1
	10740	− 5	+10	5	61	6
	10740	− 4	+ 7	4	61	3
	10740	− 1	+ 7	1	48	7
	10740	+ 3	+ 5	3	85	4
	10737	+22	+16	24	12	4
	(5)	(72)	(+6)		1283	31
7.682	10747	−85	−13	85	194	1
N−2	10747	−79	−12	79	242	3
	10743	−46	+14	46	12	1
	10743	−41	+10	41	61	3
	10743	−41	+ 8	41	48	1
	10743	−38	+ 9	38	24	4
	10742	−35	+ 7	35	97	4
	10742	−31	+ 9	31	48	1
	10742	−28	+ 8	28	12	4
	10742	−25	+ 7	25	194	1
	10741	−30	−11	34	61	12
	10741	−29	− 8	33	364	1
	10746	− 6	+20	16	12	1
	10740	+ 8	+10	10	48	5
	10740	+11	+ 7	11	73	12
	10740	+15	+ 7	15	48	1
	10740	+17	+ 6	17	73	1
	(6)	(59)	(+6)		1611	56
8.646	10747	−69	−13	71	145	1
N−3	10747	−66	−11	68	48	6
	10747	−65	−13	69	291	1
	10743	−32	+13	33	6	1
	10743	−30	+11	30	97	10
	10743	−29	+ 8	29	61	2
	10743	−26	+ 9	26	109	10
	10742	−23	+ 7	23	73	3
	10742	−19	+ 9	20	12	1
	10742	−12	+ 6	12	194	1
	10741	−19	− 8	24	24	6
	10741	−18	−12	25	97	11
	10741	−17	− 8	22	291	1
	10740	+22	+ 8	22	61	12
	10740	+26	+ 7	26	218	27
	10740	+29	+ 5	29	12	1
	(5)	(47)	(+6)		1739	94
9.651	10747	−58	−14	62	97	4
N−4	10747	−57	−13	61	170	1
	10747	−55	−11	58	48	1
	10747	−53	−13	56	6	1
	10747	−51	−13	55	315	1
	10743	−17	+11	17	73	5
	10743	−16	+ 9	17	194	12
	10743	−15	+ 8	15	24	7
	10743	−11	+ 8	11	170	15
	10742	− 9	+ 7	9	36	6
	10742	− 9	+ 9	10	6	1

AUGUST

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
	10742	+ 2	+ 7	2	12	4
	10742	+ 3	+ 7	3	194	1
	10741	− 3	−11	18	36	10
	10741	− 3	− 8	15	315	1
	10740	+36	+ 8	36	97	10
	10740	+39	+ 7	39	218	15
	10740	+42	+ 5	42	97	13
	(5)	(33)	(+6)		2108	108
10.733	10747	−44	−13	48	145	7
N–2	10747	−41	−12	45	61	1
	10747	−38	−13	42	315	1
	10743	− 3	+10	4	36	1
	10743	− 1	+ 9	3	170	1
	10743	− 1	+ 8	2	24	1
	10743	+ 2	+ 7	1	48	4
	10743	+ 6	+ 7	6	194	10
	10742	+ 7	+ 6	7	24	3
	10742	+ 9	+ 7	9	12	1
	10742	+16	+ 7	16	194	2
	10741	+ 8	−12	20	24	4
	10741	+10	− 9	18	291	1
	10741	+12	−12	21	12	2
	10740	+50	+ 7	50	121	4
	10740	+54	+ 5	54	194	7
	(5)	(19)	(+6)		1865	50
11.700	10747	−30	−13	36	218	7
N–3	10747	−27	−13	33	73	2
	10747	−24	−12	30	194	3
	10743	+11	+ 8	11	194	3
	10743	+13	+ 7	13	97	6
	10743	+17	+ 7	17	339	7
	10741	+24	− 9	28	145	1
	10742	+29	+ 6	29	61	1
	10742	+30	+ 8	30	24	5
	10742	+30	+ 6	30	194	1
	10740	+64	+ 7	64	145	4
	10740	+66	+ 5	66	97	3
	(5)	(6)	(+6)		1781	43
12.715	10747	−18	−14	26	36	7
N–3	10747	−15	−12	23	97	8
	10747	−11	−11	21	170	5
	(*)	+21	+ 4	21	6	1
	10743	+22	+ 9	22	97	5
	10743	+25	+ 8	25	145	7
	10743	+31	+ 8	31	291	1
	10743	+33	+ 8	33	6	1
	10741	+35	−12	39	6	1
	10741	+37	−10	41	242	1
	10742	+43	+ 6	43	121	2
	10750	+61	+18	61	24	2
	10750	+64	+16	64	48	4
	10740	+78	+ 7	78	97	1
	10740	+80	+ 5	80	194	3
	(7)	(353)	(+6)	——	1580	49

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
13.653	10751	−73	−17	77	24	1
N–3	10747	− 3	−13	20	61	7
	10747	+ 2	−12	19	97	9
	10747	+ 4	−12	20	61	1
	10743	+37	+ 8	37	194	14
	10743	+40	+ 7	40	36	7
	10743	+44	+ 7	44	291	1
	10741	+47	−14	51	12	1
	10741	+49	−10	52	291	1
	10742	+53	+ 6	53	6	2
	10742	+55	+ 6	55	194	2
	10750	+75	+17	75	12	2
	10750	+79	+16	79	48	1
	(6)	(341)	(+7)		1327	49
14.646	10751	−62	−16	67	48	1
N–3	10751	−58	−17	61	73	3
	10747	+10	−15	24	48	9
	10747	+14	−13	25	48	4
	10747	+16	−13	26	61	1
	10743	+48	+ 8	48	36	1
	10743	+50	+ 8	50	97	9
	10743	+55	+ 5	55	6	1
	10743	+58	+ 6	58	315	1
	10741	+62	−10	64	267	1
	10742	+69	+ 5	69	194	1
	(5)	(327)	(+7)		1193	32
15.653	10752	−68	−15	70	12	1
N–3	10752	−67	−17	70	12	1
	10751	−50	−17	55	48	2
	10751	−50	−15	54	6	1
	10751	−44	−17	50	97	6
	10747	+26	−14	34	36	6
	10747	+28	−14	35	48	1
	10743	+65	+ 6	65	24	5
	10743	+70	+ 6	70	291	1
	10741	+75	−10	76	267	1
	10742	+83	+ 5	83	194	1
	(6)	(314)	(+7)		1035	26
16.651	10752	−64	−18	68	97	4
N–3	10752	−60	−17	64	121	3
	10752	−55	−13	58	12	1
	10753	−39	+ 8	39	12	1
	10753	−36	+ 8	36	24	1
	10751	−36	−17	42	24	4
	10751	−31	−17	38	36	3
	10751	−29	−18	38	97	1
	(*)	+41	− 7	43	12	2
	10747	+42	−14	46	24	1
	10743	+84	+ 6	84	291	1
	(6)	(301)	(+7)		750	22
17.653	10752	−49	−18	53	194	4
N–3	10752	−44	−17	50	73	5

AUGUST

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
	10751	−22	−18	33	36	6
	10751	−15	−19	30	24	5
	10751	−14	−19	29	73	1
	10747	+56	−14	60	24	2
	(3)	(288)	(+7)		424	23
18.645	10752	−42	−20	49	12	1
N−3	10752	−38	−19	45	48	1
	10752	−37	−17	43	12	3
	10752	−37	−21	46	12	1
	10752	−34	−16	42	12	2
	10752	−30	−16	38	32	4
	10754	−13	−17	28	32	3
	10751	−10	−18	27	48	6
	10751	− 6	−18	26	73	8
	10751	− 2	−21	28	24	3
	10751	− 2	−18	25	97	1
	10747	+70	−14	72	12	1
	(4)	(275)	(+7)		414	34
19.708	10752	−22	−22	37	61	1
N−2	10752	−20	−19	32	48	1
	10755	−18	−17	30	48	1
	10755	−15	−18	29	48	1
	(*)	−13	−11	23	24	3
	10754	− 4	−19	27	48	4
	10754	+ 1	−19	26	97	4
	10751	+ 6	−19	27	73	6
	10751	+10	−20	28	24	5
	10751	+13	−20	30	97	1
	(5)	(260)	(+7)		568	27
20.649	10756	−80	+ 7	80	12	1
N−3	10755	− 2	−17	25	16	4
	10754	+10	−19	28	48	10
	10754	+14	−21	31	109	2
	10754	+16	−20	32	121	5
	10751	+23	−20	35	12	9
	10751	+26	−20	37	61	1
	(4)	(248)	(+7)		379	32
21.649	10756	−67	+ 7	67	24	1
N−2	10755	+15	−18	30	12	2
	10755	+22	−20	35	24	1
	10754	+27	−22	40	24	1
	10754	+29	−22	41	218	2
	10751	+32	−21	42	12	4
	10751	+40	−20	47	97	1
	(4)	(235)	(+7)		411	12

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
22.649	10757	−71	− 6	72	12	1
N−3	10756	−53	+ 7	53	12	1
	10754	+37	−22	46	12	6
	10754	+42	−22	50	97	2
	10754	+44	−22	52	73	3
	10751	+47	−21	53	48	12
	10751	+53	−20	59	97	1
	(4)	(222)	(+7)		351	26
23.652	10757	−56	− 7	58	12	1
N−2	10756	−38	+ 7	38	12	1
	10754	+49	−22	55	24	4
	10754	+55	−20	60	12	1
	10754	+55	−23	61	194	4
	10751	+63	−21	68	24	2
	10751	+65	−21	70	61	1
	(4)	(208)	(+7)		339	14
24.655	10756	−25	+ 5	35	6	1
N−2	10758	+ 6	− 6	16	16	6
	10754	+69	−21	72	194	1
	(3)	(195)	(+7)		216	8
25.646	10754	+85	−21	86	194	1
N−3						
	(1)	(182)	(+7)		194	1
26.581	10759	+14	+13	15	48	1
W−3						
	(1)	(170)	(+7)		48	1
27.585	(*)	+12	+14	13	12	1
W−3						
	(1)	(156)	(+7)		12	1
29.641						
N−2						
	(0)				0	0
30.654	10764	−85	− 6	85	218	1
N−2	10763	−80	+10	80	194	1
	(2)	(116)	(+7)		412	2
31.663	10763	−76	+10	76	121	1
N−2	10763	−74	+12	74	97	4
	10763	−68	+10	68	291	1
	10764	−72	− 6	73	121	1
	(2)	(103)	(+7)		630	7

Mean for 30 days, $A=812$, $r=71.5$

SEPTEMBER

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
1.635	10763	−62	+11	62	24	3
N–2	10763	−62	+10	62	73	1
	10763	−54	+10	54	194	1
	10764	−58	− 6	61	145	1
	10765	− 7	+17	13	12	1
	(3)	(90)	(+7)		448	7
2.678	10763	−48	+10	48	170	6
N–3	10763	−40	+10	40	218	1
	10764	−46	− 6	48	80	1
	10765	+ 4	+17	11	12	1
	10765	+ 7	+15	11	12	1
	(3)	(76)	(+7)		492	10
3.840	10769	−80	− 4	80	436	1
N–3	10763	−34	+11	34	194	2
	10763	−30	+11	30	48	1
	10763	−29	+10	29	48	1
	10763	−23	+11	24	194	1
	10764	−30	− 6	33	73	1
	10765	+20	+17	22	16	1
	10765	+23	+16	25	24	3
	(4)	(61)	(+7)		1033	11
4.637	10769	−69	− 4	69	388	1
N–3	10763	−25	+11	25	12	1
	10763	−23	+12	24	97	5
	10763	−19	+11	20	48	4
	10763	−17	+10	18	73	1
	10763	−12	+10	13	145	1
	10764	−19	− 6	24	73	1
	(3)	(50)	(+7)		836	14
5.681	10769	−59	− 3	61	170	2
N–2	10769	−55	− 4	56	436	1
	10763	− 9	+11	11	73	7
	10763	− 5	+10	6	48	5
	10763	− 2	+ 9	2	73	3
	10763	+ 1	+ 9	2	133	5
	10764	− 6	− 6	15	73	1
	(3)	(36)	(+7)		1006	24
6.817	10773	−73	+ 2	73	97	1
N–2	10769	−53	− 4	54	24	2
	10769	−45	− 3	46	121	8
	10769	−40	− 4	42	436	1
	10771	−29	−13	35	12	1
	10763	+ 4	+10	5	97	10
	10763	+10	+ 9	11	12	1
	10763	+14	+ 7	14	61	1
	10763	+16	+ 8	16	97	11
	10763	+18	+ 8	18	85	1
	10764	+ 9	− 6	17	73	1
	(5)	(21)	(+7)		1115	38
7.637	10773	−62	+ 2	62	73	1
N–3	10772	−45	− 5	46	24	5
	10769	−31	− 2	32	6	5
	10769	−29	− 4	32	388	1
	10764	+21	− 6	25	48	1
	10763	+23	+ 9	23	12	1
	10763	+27	+ 7	27	48	1
	10763	+29	+ 7	29	36	6
	10763	+30	+ 7	30	97	1
	(5)	(10)	(+7)		732	22
8.633	10775	−80	+ 6	80	145	1
N–3	10775	−76	+ 6	76	194	1
	10774	−73	+18	74	12	2
	10773	−49	+ 2	49	48	1
	10772	−32	− 4	33	12	1
	10769	−17	− 3	21	24	4
	10769	−15	− 4	19	388	1
	10771	− 7	−13	23	12	3
	10764	+34	− 7	36	36	1
	10764	+36	−11	40	48	4
	10763	+39	+ 7	39	48	1
	10763	+43	+ 7	43	97	3
	(8)	(357)	(+7)		1064	23
9.810	10775	−75	+ 9	75	388	4
N–2	10775	−69	+ 7	69	97	1
	10775	−62	+ 7	62	97	1
	10775	−60	+ 7	60	145	1
	10774	−61	+17	61	24	2
	10774	−57	+17	57	97	1
	10773	−34	+ 2	35	61	1
	10769	0	− 4	11	436	1
	10771	+ 4	−12	19	73	6
	10764	+50	− 8	52	24	1
	10764	+50	−12	53	61	3
	10764	+53	−11	56	194	1
	10763	+58	+ 7	58	36	2
	(7)	(342)	(+7)		1733	25
10.649	10775	−62	+ 9	62	582	4
N–3	10775	−62	+11	62	145	2
	10775	−58	+10	58	61	3
	10775	−57	+ 7	57	48	2
	10775	−49	+ 7	49	194	2
	10775	−47	+ 7	47	121	1
	10775	−45	+ 8	45	24	2
	10774	−49	+19	49	16	2
	10774	−43	+17	44	73	1
	10773	−22	+ 2	23	48	1
	10769	+12	− 4	15	436	1
	10771	+15	−13	25	24	2
	10771	+17	−12	26	12	2
	10764	+61	− 8	63	16	1
	10764	+61	−12	64	48	3
	10764	+66	−11	67	145	1
	10763	+69	+ 7	69	61	5
	(7)	(331)	(+7)		2054	35
11.649	10776	−71	−17	75	97	1
N–3	10775	−50	+ 8	50	206	4

SEPTEMBER

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
	10775	−49	+ 9	49	291	1
	10775	−48	+11	48	218	2
	10775	−44	+ 9	44	36	2
	10775	−42	+ 7	42	121	1
	10775	−37	+ 7	37	73	1
	10775	−36	+ 6	36	121	1
	10775	−32	+ 8	32	12	1
	10774	−30	+18	32	73	1
	10773	− 9	+ 2	11	48	1
	10772	+12	− 6	17	36	3
	10769	+27	− 4	30	388	1
	10771	+29	−13	35	24	4
	10764	+74	−11	75	48	1
	10764	+79	−12	80	194	1
	(8)	(317)	(+7)		1986	26
12.657	10778	−75	+ 9	75	16	2
N–3	10780	−68	−22	71	24	2
	10776	−58	−16	62	48	1
	10777	−50	−11	53	194	1
	10777	−48	−12	51	109	2
	10779	−43	−18	50	36	2
	10775	−38	+11	38	24	1
	10775	−38	+ 8	38	121	1
	10775	−37	+ 7	37	97	3
	10775	−36	+ 9	36	194	4
	10775	−35	+11	35	218	2
	10775	−30	+10	30	48	2
	10775	−23	+ 7	23	73	3
	10775	−21	+ 6	21	73	1
	10774	−17	+18	20	61	1
	10772	+25	− 7	28	12	2
	10772	+28	− 7	32	6	1
	10769	+39	− 5	41	388	1
	10771	+44	−12	49	12	1
	(10)	(304)	(+7)		1754	33
13.701	10778	−65	+15	65	12	1
N–3	10778	−58	+10	58	24	1
	10780	−55	−18	60	12	2
	10777	−36	−11	40	206	4
	10777	−33	−13	38	48	3
	10777	−32	−11	37	6	1
	10779	−32	−18	40	73	3
	10779	−29	−18	38	61	2
	10775	−23	+ 8	23	97	6
	10775	−22	+11	23	12	1
	10775	−20	+ 9	20	170	4
	10775	−19	+10	19	194	1
	10775	− 8	+ 6	8	73	4
	10775	− 6	+ 5	6	61	1
	10774	− 3	+18	12	48	3
	10769	+51	− 5	52	388	1
	(7)	(290)	(+7)		1485	38
14.659	10781	−75	+13	75	24	4
N–4	10778	−45	+10	45	36	1
	10777	−23	−12	30	61	9
	10779	−21	−19	33	24	3
	10779	−18	−18	31	12	4
	10779	−15	−20	32	48	1
	10775	−12	+ 6	12	12	1
	10775	−11	+ 7	11	145	9
	10775	−10	+ 9	11	12	4
	10775	− 8	+ 8	8	73	2
	10775	− 6	+ 9	7	194	17
	10775	+ 3	+ 3	6	12	1
	10775	+ 4	+ 6	4	12	2
	10775	+ 5	+ 5	5	145	3
	10774	+ 9	+18	14	36	2
	10769	+67	− 7	68	412	1
	(7)	(278)	(+7)		1258	64
15.652	10781	−64	+14	64	73	3
N–3	10781	−59	+12	59	73	7
	10778	−39	+13	39	24	3
	10778	−33	+ 9	33	48	3
	10777	−11	−12	22	12	8
	10779	− 8	−18	27	24	7
	10779	− 2	−20	28	61	2
	10775	+ 2	+ 6	2	267	15
	10775	+ 5	+ 7	5	85	4
	10775	+ 8	+ 8	8	145	13
	10775	+18	+ 5	18	145	12
	10774	+22	+18	24	24	2
	10769	+80	− 7	80	485	1
	(7)	(265)	(+7)		1466	80
16.613	10781	−52	+15	52	97	3
W–3	10781	−48	+14	48	24	4
	10781	−44	+14	44	145	1
	10778	−19	+ 9	19	24	1
	10777	+ 3	−13	20	24	12
	10779	+10	−20	28	12	4
	10779	+12	−20	30	36	1
	10775	+16	+ 6	16	242	10
	10775	+17	+ 8	17	61	7
	10775	+21	+11	22	24	4
	10775	+21	+ 8	21	97	14
	10775	+23	+ 7	23	12	10
	10775	+32	+ 6	32	145	12
	10774	+38	+19	39	24	2
	(6)	(252)	(+7)		967	85
17.625	10781	−38	+15	38	97	14
W–3	10781	−35	+13	35	16	1
	10781	−31	+14	32	133	12
	10778	− 5	+ 9	5	12	1
	10779	+28	−20	38	16	1
	10775	+29	+11	29	6	2
	10775	+32	+ 6	32	291	16
	10775	+32	+ 8	32	48	12
	10775	+37	+10	37	73	11
	10775	+47	+ 6	47	97	6
	10775	+48	+ 3	48	12	1
	10774	+51	+19	51	24	2
	(5)	(239)	(+7)		825	79

SEPTEMBER

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
18.693	10786	−75	+10	75	242	4
N−2	10786	−74	+ 8	74	97	1
	10784	−57	+14	57	97	2
	10784	−55	+15	55	48	7
	10784	−52	+14	50	73	1
	10781	−23	+13	24	218	26
	10781	−19	+10	19	12	1
	10781	−18	+12	19	97	2
	10778	+ 8	+ 9	9	24	1
	10779	+41	−21	49	24	1
	10775	+44	+ 6	44	206	4
	10775	+45	+ 5	45	48	2
	10775	+50	+ 8	50	12	1
	10775	+58	+ 5	58	97	2
	10775	+58	+ 2	58	24	3
	10775	+60	+ 3	60	36	2
	(6)	(224)	(+7)		1355	60
19.649	10786	−63	+10	63	242	1
N−3	10786	−59	+ 8	59	36	2
	10786	−57	+ 8	57	24	2
	10784	−45	+13	45	12	7
	10784	−44	+15	44	194	1
	10784	−42	+14	42	12	2
	10784	−38	+14	38	194	2
	10781	−11	+12	12	48	3
	10781	− 9	+11	11	388	8
	10781	− 8	+12	11	12	1
	10781	− 6	+10	6	24	2
	10781	− 5	+11	7	97	1
	10778	+21	+ 8	21	24	1
	10779	+53	−21	59	12	1
	10775	+57	+ 5	57	73	2
	10775	+63	+ 7	63	36	1
	(6)	(212)	(+7)		1428	37
20.638	10786	−50	+10	50	170	1
N−2	10786	−45	+ 8	45	48	4
	10786	−43	+ 8	43	24	1
	10784	−32	+15	34	242	1
	10784	−29	+12	29	12	6
	10784	−27	+14	28	73	1
	10784	−25	+13	26	291	1
	10781	+ 1	+11	4	24	1
	10781	+ 4	+10	5	339	5
	10781	+ 8	+ 8	8	145	1
	10781	+ 8	+10	10	48	1
	10775	+69	+ 6	69	61	2
	(4)	(199)	(+7)		1477	25
21.650	10786	−37	+10	37	109	3
N−2	10786	−32	+ 8	32	24	1
	10786	−29	+ 7	29	73	3
	10784	−19	+16	22	194	3
	10784	−11	+13	13	291	2
	10785	−16	+ 5	16	48	3
	10785	−13	+ 7	13	36	2
	10781	+16	+11	16	12	1
	10781	+18	+11	18	533	12
	10781	+18	+ 7	18	6	1
	10781	+22	+10	22	145	1
	10781	+22	+ 8	22	48	1
	10787	+47	−12	51	48	1
	10787	+49	−13	53	48	1
	(5)	(185)	(+7)		1615	35
22.642	10788	−79	+ 7	79	24	4
N−3	10786	−23	+10	23	121	4
	10786	−17	+ 9	17	12	6
	10786	−13	+ 7	13	121	7
	10786	−13	+ 9	14	6	1
	10784	− 5	+16	10	97	4
	10784	− 3	+13	6	12	6
	10784	+ 1	+12	5	291	1
	10784	+ 2	+13	6	24	1
	10785	− 4	+ 5	4	61	4
	10785	+ 1	+ 7	1	61	2
	10781	+31	+11	31	436	9
	10781	+32	+ 8	32	36	1
	10781	+34	+11	34	109	1
	10781	+35	+ 9	35	48	1
	10787	+60	−12	63	73	2
	10787	+62	−11	65	48	4
	(6)	(172)	(+7)		1580	58
23.653	10788	−69	+ 8	69	24	2
N−3	10788	−63	+11	63	24	5
	10786	−10	+ 9	11	12	7
	10786	− 3	+ 7	3	24	9
	10786	+ 2	+ 7	2	109	15
	10784	+ 9	+18	14	61	6
	10784	+14	+12	15	12	4
	10784	+15	+14	17	291	1
	10785	+10	+ 5	11	24	2
	10785	+15	+ 7	15	36	1
	10781	+45	+11	45	533	9
	10781	+45	+12	45	24	2
	10787	+77	−11	77	73	1
	(6)	(159)	(+7)		1247	64
24.636	10788	−55	+ 8	55	12	1
N−2	10786	+14	+ 7	14	194	16
	10784	+22	+18	24	61	3
	10784	+29	+14	30	291	2
	10785	+25	+ 7	25	24	2
	10785	+28	+ 6	28	48	1
	10781	+60	+10	60	485	1
	10781	+61	+12	61	48	1
	(5)	(146)	(+7)		1163	27
25.644	10788	−41	+ 8	41	12	1
N−3	10788	−39	+ 5	39	12	3
	10786	+25	+ 7	25	97	4
	10786	+29	+ 7	29	145	18
	10784	+35	+18	36	97	5
	10784	+44	+14	44	315	1
	10784	+44	+15	44	36	2

SEPTEMBER

U.T.	No.	Δl	φ	ρ	A	s
		°	°	°		
	10785	+42	+ 7	42	16	1
	10785	+42	+ 5	42	12	1
	10781	+72	+10	10	436	2
	(5)	(133)	(+7)		1178	38
26.628	10789	−74	− 8	74	36	1
N–3	10786	+37	+ 7	37	73	3
	10786	+42	+ 7	42	218	10
	10784	+48	+18	48	48	2
	10784	+58	+13	58	388	6
	10785	+53	+ 6	53	48	3
	10785	+57	+ 7	57	12	1
	(4)	(120)	(+7)		823	26
27.724	10789	−60	− 9	62	24	1
N–3	10791	−32	+21	34	36	2
	10791	−29	+21	32	24	1
	10790	− 9	+ 8	9	16	2
	(*)	+ 3	+29	22	12	3
	10786	+51	+ 6	51	24	2
	10786	+57	+ 6	57	61	5
	10786	+59	+ 6	59	73	1
	10784	+61	+17	61	48	1
	10784	+70	+11	70	97	1
	10784	+72	+12	72	339	1
	10785	+70	+ 6	70	48	2
	(7)	(105)	(+7)		802	22
28.650	10791	−20	+21	24	24	4
W–2	10791	−15	+21	21	48	13
	10786	+68	+ 7	68	48	1
	10786	+71	+ 7	71	48	2
	10786	+73	+ 8	73	145	1
	10785	+83	+ 6	83	48	1
	10784	+88	+15	88	339	1
	(4)	(93)	(+7)		700	23
29.701	10791	− 1	+21	14	48	2
N–2	(1)	(79)	(+7)		48	2
30.819	10793	−80	− 3	80	194	1
N–2	10792	− 3	+ 9	3	48	2
	10792	− 1	+ 8	1	61	2
	10791	+14	+21	19	24	1
	(3)	(64)	(+7)		327	6

Mean for 30 days, $A=1133$, $r=87.9$